IN THE CLAIMS:

Please substitute the following listing of claims for the previous listing of claims.

1. (previously presented) A substrate processing method comprising:

(a) providing a substrate in a process zone, the substrate comprising an etch resistant material over a mask material, the mask material being over an underlying material;

(b) providing an energized etching gas in the process zone to etch the mask material, the energized etching gas comprising a first composition;

(c) changing the first composition of the etching gas to a second composition to etch the mask material;

(d) removing the etch resistant material in the process zone; and

(e) after (d), providing an energized process gas in the process zone to etch the underlying material.

2. (previously presented) A method according to claim 1 wherein (d) comprises providing an energized stripping gas in the process zone under process conditions selected to substantially remove a layer of etch resistant material.

3. (Original) A method according to claim 2 wherein the energized stripping gas comprises an oxygen-containing gas.

4. (Original) A method according to claim 3 wherein the energized stripping gas further comprises an oxygen activating gas.

5. (Original) A method according to claim 4 wherein the oxygen activating gas comprises a nitrogen-containing gas.

6-9. (Canceled)

10. (previously presented) A method according to claim 1 comprising etching apertures in the mask material.

11. (Previously presented) A method according to claim 1 wherein the underlying material comprises silicon and wherein the energized process gas comprises a halogen-containing gas.

12. (previously presented) A method according to claim 11 wherein the energized process gas comprises one or more of CF_4, C_2F_6, NF_3, SF_6, Cl_2, Br_2, HBr, and HCl.

13. (Original) A method according to claim 1 wherein the process zone is an energized gas zone in a process chamber.

14. (previously presented) A substrate processing method comprising:

(a) providing a substrate in a process zone, the substrate comprising an etch resistant material and a mask material;

(b) providing a first energized etching gas in the process zone to etch the mask material;

(c) after (b), providing a second energized etching gas in the process zone to etch the mask material; and

(d) removing the etch resistant material.

15. (Canceled)

16. (previously presented) A method according to claim 14 wherein the etch resistant material comprises photoresist.

17. (previously presented) A method according to claim 14 comprising forming apertures in the mask material in accordance with a pattern of the etch resistant material.

18. (currently amended) A method according to claim 14 wherein (d) comprises providing an energized stripping gas in the process zone under process conditions selected to substantially remove the ~~second~~ etch resistant material.

19. (Original) A method according to claim 18 wherein the energized stripping gas comprises an oxygen-containing gas.

20. (previously presented) A method according to claim 14 wherein the substrate comprises a layer under the etch resistant and mask materials and further comprising providing an energized process gas to etch the layer.

21. (previously presented) A method according to claim 14 wherein the substrate comprises a layer under the etch resistant and mask materials and further comprising providing an energized process gas in the process zone to etch the layer.

22. (previously presented) A method according to claim 14 wherein the substrate comprises a layer under the etch resistant and mask materials and further comprising, after (d), providing an energized process gas in the process zone to etch the layer.

23. (Original) A method according to claim 22 wherein the layer comprises silicon and wherein the energized process gas comprises a halogen-containing gas.

24. (previously presented) A method according to claim 23 wherein the energized process gas comprises one or more of CF_4, C_2F_6, NF_3, SF_6, Cl_2, Br_2, HBr, and HCl.

25. (Original) A method according to claim 14 wherein the process zone is an energized gas zone in a process chamber.

26-33 (cancelled)

34. (previously presented) A substrate processing method comprising:

(a) providing a substrate in a process chamber, the substrate comprising an etch resistant material over a mask material;

(b) providing a first energized process gas in the chamber to etch the mask material, the process gas comprising a polymer forming gas, thereby depositing process residue on surfaces of the process chamber;

(c) providing a second energized process gas in the chamber comprising a non-polymer forming gas to simultaneously etch the mask material and at least partially remove the process residue from the surfaces of the process chamber; and

(d) after (c), providing a third energized process gas in the chamber to further process the substrate.

35. (previously presented) A method according to claim 34 wherein (b) comprises providing an energized first process gas in the chamber to form apertures in the mask material on the substrate.

36-37. (Canceled)

38. (Original) A method according to claim 34 wherein (d) comprises etching a material on the substrate.

39-50. (Cancelled)

51. (previously presented) A substrate processing method comprising:

(a) providing a substrate in a process zone, the substrate comprising resist material over mask material;

(b) providing an energized first process gas in the process zone to etch apertures in the mask material;

(c) after (b), providing an energized second process gas in the process zone to etch the apertures in the mask material;

(d) providing an energized process gas in the process zone to remove the resist material; and

(e) providing an energized process gas in the process zone to etch a layer under the mask material.

52. (previously presented) A method according to claim 51 wherein (d) comprises providing an energized stripping gas in the process zone under process conditions selected to substantially remove a layer of resist material.

53. (Original) A method according to claim 52 wherein the energized stripping gas comprises an oxygen-containing gas.

54. (Original) A method according to claim 51 wherein the layer comprises silicon and wherein the energized process gas comprises a halogen-containing gas.

55. (previously presented) A substrate processing method comprising:

(a) providing a substrate in a process zone, the substrate comprising a first etch resistant material, a second etch resistant material, an anti-reflective coating material that is between the first and second etch resistant materials, and a silicon-containing layer that is under the first and second etch resistant materials;

(b) providing a first energized process gas in the process zone to form apertures in the first etch resistant material;

(c) removing the second etch resistant material in the process zone; and

(d) providing a second energized process gas in the process zone to simultaneously remove the anti-reflective coating material and etch the silicon-containing layer, the second energized process gas comprising one or more of CF_4, C_2F_6, NF_3, SF_6, Cl_2, Br_2, HBr, and HCl.

56. (previously presented) A substrate processing method comprising:

(a) providing a substrate in a process zone, the substrate comprising a resist material over a mask material, the mask material being over an underlying material;

(b) forming apertures in the mask material by:

(i) in a first step, exposing the mask material to a first energized process gas in the process zone, the first energized process gas being substantially absent a polymer forming gas; and

(ii) in a second step, exposing the mask material to a second energized process gas in the process zone, the second energized process gas comprising polymer forming gas;

(c) removing the resist material from the substrate by providing an energized stripping gas in the process zone; and

(d) after (c), providing a third energized process gas in the process zone to etch the underlying material.

57. (Canceled)

58. (previously presented) A method according to claim 56 wherein the first step comprises exposing the mask material to etchant gas comprising one or more of CF_4, C_2F_6, NF_3, and SF_6, and the second step comprises exposing the mask material to etchant gas comprising one or more of CHF_3, CH_2F_2, and CH_3F.

59. (Previously presented) A method according to claim 56 wherein (b) comprises providing a first energized process gas comprising one or more of HCl, BCl_3, HBr, Br_2, Cl_2, CCl_4, $SiCl_4$, SF_6, F_2, NF_3, HF, CF_3, CF_4, CH_3F, CHF_3, $C_2H_2F_2$, $C_2H_4F_6$, C_2F_6, C_3F_8, C_4F_8, C_2HF_5, C_4F_{10}, CF_2Cl_2, and $CFCl_3$.

60. (Previously presented) A method according to claim 56 wherein (c) comprises providing an energized stripping gas comprising one or more of O_2, N_2, H_2O, NH_3, CF_4, C_2F_6, CHF_3, $C_3H_2F_6$, $C_2H_4F_2$, and CH_3F.

61. (Previously presented) A method according to claim 56 wherein (c) comprises providing an energized oxygen-containing stripping gas in the process zone under process conditions selected to substantially remove the resist material.

62. (previously presented) A method according to claim 56 wherein (d) comprises providing a third energized process gas comprising one or more of CF_4, C_2F_6, NF_3, SF_6, Cl_2, Br_2, HBr, and HCl.

63. (Previously presented) A method according to claim 56 wherein (a) comprises providing a substrate in the process zone, the substrate comprising a resist material over a mask material, the mask material being over a silicon-containing material.

64. (previously presented) A method according to claim 56 wherein (a) comprises providing a substrate in the process zone, the substrate comprising a resist material over a mask material, the mask material comprising one or more of silicon oxide, TEOS, and silicon nitride, and the mask material being over an underlying material.

65. (previously presented) A substrate processing method comprising:

(a) providing a substrate in a process zone, the substrate comprising a photoresist material over a mask material, the mask material comprising one or more of silicon oxide, TEOS, and silicon nitride, and the mask material being over a silicon containing underlying material;

(b) providing an energized mask etching gas in the process zone to etch the mask material, the mask etching gas having a first composition comprising a non-polymer forming gas;

(c) changing the first composition of the mask etching gas to a second composition comprising a polymer forming gas to etch the mask material;

(d) removing the photoresist material from the substrate by providing an energized stripping gas in the process zone; and

(e) after (d), providing an energized halogen-containing process gas in the process zone to etch the silicon-containing material.

66. (previously presented) A method according to claim 65 wherein (c) comprises providing a second composition comprising one or more of HCl, BCl_3, HBr, Br_2, Cl_2, CCl_4, $SiCl_4$, SF_6, F_2, NF_3, HF, CF_3, CF_4, CH_3F, CHF_3, $C_2H_2F_2$, $C_2H_4F_6$, C_2F_6, C_3F_8, C_4F_8, C_2HF_5, C_4F_{10}, CF_2Cl_2, and $CFCl_3$.

67. (previously presented) A method according to claim 65 wherein (d) comprises providing an energized stripping gas in the process zone, the stripping gas comprising one or more of O_2, N_2, I_2O, NH_3, CF_4, C_2F_6, CHF_3, $C_3H_2F_6$, $C_2H_4F_2$, and CH_3F.

68. (previously presented) A method according to claim 65 wherein (d) comprises providing an energized oxygen-containing stripping gas in the process zone.

69. (Previously presented) A method according to claim 65 wherein (e) comprises providing an energized halogen containing process gas comprising one or more of CF_4, C_2F_6, NF_3, SF_6, Cl_2, Br_2, HBr, and HCl.

70. (previously presented) A substrate processing method comprising:

(a) providing a substrate in a process zone, the substrate comprising a resist material over a mask material, the mask material comprising one or more of silicon oxide, TEOS, and silicon nitride, the mask material being over a silicon-containing material, and an anti-reflective coating material that is between the resist material and mask material;

(b) providing an energized first mask etching gas in the process zone to etch apertures in the mask material, the energized first mask etching gas comprising one or more of CF_4, C_2F_6, NF_3 and SF_6;

(c) after (b), providing an energized second mask etching gas in the process zone to etch the apertures, the energized second mask etching gas comprising one or more of CHF_3, CH_2F_2, and CH_3F;

(c) removing the resist material from the substrate by providing an energized stripping gas in the process zone, the stripping gas comprising one or more of O_2, N_2, H_2O, NH_3, CF_4, C_2F_6, CHF_3, $C_3H_2F_6$, $C_2H_4F_2$, and CH_3F; and

(d) after (c), providing an energized process gas in the process zone to simultaneously remove the anti-reflective coating material and etch the silicon-containing material, the process gas comprising one or more of CF_4, C_2F_6, NF_3, SF_6, Cl_2, Br_2, HBr, and HCl.

71. (previously presented) A substrate processing method comprising:

(a) providing a substrate in a process zone, the substrate comprising a resist material over a mask material, the mask material being over an underlying material;

(b) forming apertures in the mask material by:

(i) in a first step, exposing the mask material to a first energized process gas in the process zone, the energized first process gas comprising one or more of CF_4, C_2F_6, NF_3, and SF_6; and

(ii) in a second step, exposing the mask material to a second energized process gas in the process zone, and energized second process gas comprising one or more of CHF_3, CH_2F_2, and CH_3F;

(c) removing the resist material from the substrate by providing an energized stripping gas in the process zone; and

(d) after (c), providing a third energized process gas in the process zone to etch the underlying material.

72. (previously presented) A method according to claim 1 wherein the first composition comprises a non-polymer forming gas, the second composition comprises a polymer forming gas, and wherein (c) comprises changing to the second composition without stopping a flow of the non-polymer forming gas.

73. (previously presented) A method according to claim 1 wherein the first composition is substantially absent polymer forming gas.

74. (previously presented) A method according to claim 1 wherein the first composition comprises one or more of CF_4, C_2F_6, NF_3, and SF_6, and wherein the second composition comprises one or more of CHF_3, CH_2F_2, and CH_3F.

75. (previously presented) A method according to claim 1 wherein the first composition consists essentially of CF_4 and argon, and wherein the second composition consists essentially of (i) CF_4, (ii) one or more of CHF_3, CH_2F_2, and CH_3F, and (iii) argon.

76. (previously presented) A method according to claim 14 wherein the first energized etching gas comprises a first composition comprising a non-polymer forming gas and the second energized etching gas comprises second composition comprising a polymer forming gas, and wherein (c) comprises changing the first composition to the second composition without stopping a flow of the non-polymer forming gas.

77. (previously presented) A method according to claim 14 wherein the first energized etching gas comprises one or more of CF_4, C_2F_6, NF_3, and SF_6, and wherein the second energized etching gas comprises one or more of CHF_3, CH_2F_2, and CH_3F.

78. (previously presented) A method according to claim 34 wherein the first energized process gas comprises one or more of CHF_3, CH_2F_2, and CH_3F, and wherein the second energized process gas comprises one or more of CF_4, C_2F_6, NF_3, and SF_6.

79. (previously presented) A method according to claim 51 wherein the energized first process gas comprises a first composition comprising a non-polymer forming gas, and wherein the energized second process gas comprises a second composition comprising a polymer forming gas, and wherein (c) comprises changing the first composition to the second composition without stopping a flow of the non-polymer forming gas.

80. (previously presented) A method according to claim 56 wherein the first energized process gas comprises a first composition comprising a non-polymer forming gas, and the second energized process gas comprises a second composition, and comprising changing the first composition to the second composition without stopping a flow of the non-polymer forming gas.

81. (previously presented) A method according to claim 65 wherein (c) comprises changing the first composition to the second composition without stopping a flow of the non-polymer forming gas.

82. (previously presented) A method according to claim 70 wherein the energized first mask etching gas comprises a first gas composition comprising a non-polymer forming gas, the energized second mask etching gas comprises a second gas composition, and wherein the first gas composition is changed to the second gas composition without stopping a flow of the non-polymer forming gas.